REMARKS

Claims 1-15 and 17-20 remain pending in this application. Claim 16 was canceled earlier.

The above amendments to the active claims have been presented solely to remove reference numerals, substitute the term "wherein" for "characterized", and otherwise improve the language of the claims. Claims 11 and 12 have been amended to improve antecedent basis. The above amendments do not raise any new issues requiring further search and/or reconsideration. Approval and entry of the above amendments are respectfully requested.

Claims 1-6, 10-12, 14-16, and 18-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vasilescu et al. (USP 7,168,923) in view of Yamada (USP 5,616,974). Claims 18 and 19 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vasilescu and Yamada in view of Lopatinsky (USP 6,194,798). Claim 13 has been rejected as being unpatentable over Vasilescu and Yamada further in view of Gold (USP 4,588,911).

Applicant respectfully traverses these rejections.

Vasilescu discloses an alternator fan "adapted to be coupled in rotation to the alternator rotor." (See abstract and column 1, lines 42-43 of Vasilescu) Column 4, lines 14-17 elaborate that "a front fan 19 and a rear fan 20 ... are fixed in rotation on the front faces of the front pole wheel 8a and the rear pole wheel 8b respectively." Vasilescu teaches welding for fixing the rotational movements of the fan and rotor to one another. (See column 6, lines 38-47; column 7, lines 44-45)

Yamada discloses a fan designed for changing blowing direction, together with a fan motor which will allow a change of direction of rotation of the vane wheel. (Column 2, lines 8-11 and claim 1, column 8, lines 24-25 of Yamada) To achieve this object, Yamada uses

attractive and repulsive forces between a plurality of permanent magnets 4a-4d fastened to the circumferential rim of its vane wheel and a magnetic body 6 mounted in a recess of an outer main body 11. (Column 3, line 57 to column 4, line 11. The magnetic body 6 is movable in the recess between angular positions P_1 and P_2. The direction of rotation of the vane wheel is changed by switching the position of the magnetic body between the relatively advanced angular position (P_1) and relative retarded angular position (P_2). (Column 2, lines 36-40)

The Examiner opines that a person of ordinary skill in the art at the time the invention was made would have found it obvious to "modify the device of Vasilescu et al to have the rotor positioning devices as taught by Yamada." (See final Office Action, page 3). Applicant respectfully disagrees.

Vasilescu teaches, similarly to the present specification, welding or otherwise uniting its fan to a rotor in such a manner that the rotor and fan rotate in unison with one another. The power or motorized force for rotating the fan is derived from the rotor in Vasilescu. Vasilescu neither supplies a separate fan motor for driving the fan nor contemplates independently rotating the fan relative to the rotor. Nowhere does Vasilescu or the art of record suggest or provide any concrete reason for severing the fastened (e.g., welded) connection and dependent relationship between the fan and rotor so as to allow rotation of the fan independently of the rotor. In fact, according to Vasilescu it was the state of the art to weld or fasten fans to rotors. (Column 1, lines 18-21 of Vasilescu)

Applicant respectfully submits that Yamada discloses a completely different fan cooling system than Vasilescu. Whereas Vasilescu welds its fan to a vehicular alternator rotor so that the alternator rotor drives the fan in unison with the rotor without change of direction of rotation, Yamada discloses a system in which the fan is an independently driven element, i.e., driven by

its own fan motor. Yamada does not teach or reasonable suggest how its fan could be installed or employed with a motor vehicle alternator such as disclosed in Vasilescu to permit the rotational movement of the fan to be independently controlled. Neither Yamada nor Vasilescu provide any insight into how the reversible fan operation of Yamada could successfully operate when fastened to a motor vehicle alternator rotor such as that of Vasilescu. There is no showing that there was any want or need in the art of motor vehicle alternators to provide a reversible fan.

Lopatinsky has been cited for its disclosure of magnet materials combined with plastic. Gold has been cited for its disclosure of powder pot for connecting wires to a rotor. Applicant respectfully submits that neither Lopatinsky nor Gold overcome the above-discussed failings of the art to teach or reasonably suggest the combination of Vasilescu and Yamada.

For these reasons, Applicant respectfully submits that a person having ordinary skill in the art at the time the invention was made would not have found it obvious to attempt to meld the distinct cooling systems of Vasilescu and Yamada with one another, and, therefore, the rejection of claims 1-15 and 17-20 is misplaced.

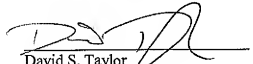
Regarding claims 4-6, 18, and 19, Applicant respectfully submits that Vasilescu and Yamada, when taken alone or in combination, do not teach the additional features of these claims. The Examiner acknowledges that the applied art does not teach mounting a magnetic target at the tubular portion of the metallic insert, but opines that this feature would have been obvious "since it has been held that rearranging parts of an invention involves only routine skill in the art." (Final Office Action, page 4) Applicant respectfully disagrees. Vascilescu does not teach a metallic target. Yamada expressly discloses positioning its alleged metallic target, i.e., the permanent magnets 4a-4d, at the circumferential rim portion of a vane wheel. (Column 3, lines 57-60 of Yamada) These alleged metallic targets are mounted at the circumferential rim in

order to create magnetically attractive and repulsive forces between the permanent magnets 4a-4d and the magnetic body 6, which is movable between positions P_1 and P_2 angularly offset by angles of $\pm$ 2.5 degrees. Changing the position of the permanent magnets 4a-4d in the manner suggested by the Examiner might disrupt the magnetic interaction between the permanent magnets 4a-4d and magnetic body 6, and seemingly would change the relative angle between these sets of magnets. There is no reasonable expectation that the resulting modified structure would properly operate given these variables. Nor is there any benefit or reason for relocating the magnets 4a-4d in the manner suggested by the Examiner.

For these additional reasons, Applicant respectfully submits that the Section 103(a) rejection of claims 4-6, 18, and 19 is misplaced and should be withdrawn.

In view of the foregoing amendment and remarks, it is respectfully submitted that the claims define the invention over the prior art of record and are in condition for allowance, and notice to that effect is earnestly solicited. Should the Examiner believe further discussion regarding the above claim language would expedite prosecution they are invited to contact the undersigned at the number listed below.

Respectfully submitted,



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